Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

REVIEWS AND ABSTRACTS OF LITERATURE

Charles Darwin and the Origin of Species: Addresses, etc., in America and England in the Year of the Two Anniversaries. EDWARD BAGNALL POULTON. London: Longmans, Green and Co. 1909.

The year 1909 was at once the centenary of the birth of Charles Darwin and the fiftieth anniversary of the appearance of his greatest work. The occasion was fittingly commemorated by scientific meetings and addresses in all parts of the world. Professor Poulton, as a leading exponent of the Darwinism of twenty years ago, and an active investigator of certain difficult evolutionary problems, was inevitably an important contributor to some of these programs, both in England and in America. Considering the circumstances of its preparation, it is no damaging criticism of the present volume to say that it contains little that is new, and little, indeed, that the author has not himself already told us.[1]

To the reviewer, the most interesting pages of the book relate to Darwin's personality and to his frame of mind in dealing with various scientific problems. In this regard, he will ever remain as an ideal to successive generations of younger investigators, whatever may become of his special hypotheses in the field of biology. A number of hitherto unpublished letters are introduced by Poulton, which serve to confirm the impressions which the world has already formed of the great naturalist's modesty and his boundless sympathy with the work of others.

In recent years, along with the growing mass of legitimate criticism of certain of Darwin's theories, there has sometimes been displayed a tendency to belittle his scientific attainments, even to the point of charging him with superficiality and a proneness to forming unwarranted conclusions. Indeed, it does not appear difficult to select passages from Darwin's writings in support of this view. Such charges reveal, however, an unfortunate lack of historical perspective. To begin with, Darwin was a *naturalist*—a thing almost impossible at the present time—and the data for his speculations were drawn from every branch of biology, as well as from geology, geography, and other sciences. This, indeed, was inevitable for the man who should establish the theory of organic evolution. To the present-day specialist, who must concentrate his activities upon a very few organisms viewed in a very few relations, the work of all the great pioneers in his science must, in a sense, seem superficial. The latter were forced to admit much evidence provisionally, which the twentieth century experimentalist would very properly reject as inadequate. Thus alone could the broad outlines of the science be sketched. It is in no way to the discredit of these great pioneers that some of their outlines were later erased in the light of more exact knowledge.

Poulton is at considerable pains to refute that much hackneyed bit of moralizing over the blighting effect of a scientific career upon the esthetic faculties. As is well known, Darwin's own autobiography affords a muchquoted text in support of this thesis. But Poulton dwells upon the wretched health endured by Darwin throughout nearly the whole of his active life, and points out that this concentration upon his scientific pursuits was, in his case, a condition essential to the accomplishment of his work. Darwin's experience—so often held up to us as a dreadful warning—thus seems to afford no evidence for the mutual exclusiveness of scientific and esthetic development in the same mind. The author cites his own wide acquaintance with scientific men in support of the contrary view, and it is likely that most readers will draw similar evidence from their own experience.

---

[1] "Essays on Evolution, 1889–1907," reviewed in this JOURNAL, Vol. VI., page 185.

Much of the volume at hand is devoted to Poulton's own speculations in explanation of the colors of certain butterflies and an elaboration of the theories of "mimicry," originally framed by H. W. Bates and Fritz Müller. From the standpoint of organic evolution, these cases undoubtedly raise some very difficult problems, and Darwin himself thought them worthy of considerable attention. To Poulton they become the central theme in his view of nature, and the various hypothetical types of "mimicry" and protective coloration—each designated with a rather unwieldy name—are discussed as fundamental realities, regardless of the very slender thread of experimental evidence on which they depend. It is true that he concedes the "paramount need for experimental research and field observations . . . [which] should be undertaken on the largest possible scale" (p. 191). But for him, the case seems to be pretty conclusively settled without recourse to such experiments, and he later qualifies his demand for investigations of this sort with the assurance that "while human performance is of the deepest interest for the solution of mysteries innumerable, of more profound significance still, for the comprehension of the method of evolution, is the vast performance of nature herself" (p. 201). True, but it is that very performance itself the method of which is here in question. Nature is not yet such an open book that he who runs may read.

Poulton believes that "the Müllerian hypothesis appears to explain a series of remarkable relationships which remain coincidences under any other hypothesis" (p. 191). On the other hand, Punnett[2] has pointed out the existence of some evidence that, in one alleged case of "mimicry" at least, the coloration of two "mimetic" forms, belonging to a single species (supposed to be modeled after two distinct species, belonging to a different family) behave to one another as Mendelian alternatives. "On this view," according to Punnett, "the genera *Amauris* and *Euralia* [the "mimicked" and the "mimicking," respectively] contain a similar set of pattern factors, and the conditions, whatever they may be, which bring about mutation in the former lead to the production of a similar mutation in the latter." The fact that among domesticated rodents (rats, mice, guinea-pigs and rabbits) not only the same colors, but some of the same general types of color *pattern,* have arisen independently argues for the possibility of such an origin of "mimetic" resemblances in insects. This view, like its alternative, is at present wholly unproven, and a final decision of the question is probably still remote, but the Mendelian-Mutation explanation certainly relieves us of the truly terrible strain imposed upon our imagination by the classical "mimicry" hypotheses, as elaborated by such writers as Poulton.

---

[2] "Mendelism," pp. 144 et seq.

As regards Mendel's Law, our author has plainly shifted his point of view somewhat since the time when he could refer airily to "Mendel's interesting discovery." He now thinks that known facts "are enough to stamp Mendel's discovery as among the greatest in the history of the biological sciences" (p. 278).

Poulton appears to feel keenly the contemptuous attitude of many of his younger colleagues toward the real founders of the theory of evolution, and deprecates severely the gregarious tendency of the great body of minor workers, who rush to fall in line with every procession which seems to be marching behind a promising leader. I can not refrain from quoting some of the strong words with which our writer seeks to relieve his feelings: "In these later years the multitudes seem, for the moment at least, to recognize a prophet in every reed shaken with the wind. It would be interesting to know the number of forgotten works, of works soon to be forgotten, of works dead before they were born, which have been proclaimed as 'the most important contribution to biological thought since the appearance of the *Origin of Species.*' I would that the multitudes were not mere followers of the fleeting fashions of a day, but that they were right in their intuitions: I would that Newtons and Darwins might arise in every generation. I can not admit that the inability to see them on every side is merely the natural consequence of a cynical and pessimistic spirit" (p. ix). Which one of us has not been in just that mood?

FRANCIS B. SUMNER.

WOODS HOLE, MASS.

Schopenhauer's Criticism of Kant's Theory of Experience. RADOSLAV A. TSANOFF. New York: Longmans, Green, & Co. *Cornell Studies in Philosophy,* No. 9. 1911. Pp. xiii + 77.

The purpose of the author of this monograph was "to analyze closely" the three phases of Kant's philosophy which Schopenhauer regarded as most significant, viz., that philosophy must (1) "recognize the purely phenomenal character of knowledge," (2) "realize the primacy of will over reason," and (3) "be kept distinct from theology," and then "to inquire into their consistency and philosophical significance, as well as to determine as nearly as possible their historical value as interpretations of Kant's philosophy." The "inherent incompatibility of the two systems" receives the emphasis rather than "the psychological aspects of the problem." A brief discussion of the literature in English, German, and French shows the need for such a work as this.

The four chapters which constitute the body of the book have the following titles, indicating the nature and scope of the discussion: (1) "The Nature and Genesis of Experience: Perception and Conception"; (2) "The Principles of Organization in Experience: The Deduction and